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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,018	02/20/2004	Christoph Gurtler	PO-7979/LeA 36,396	2512
	7590 02/07/2007 ERIAL SCIENCE LLC	•	EXAMINER	
100 BAYER ROAD PITTSBURGH, PA 15205			GILLESPIE, BENJAMIN	
			ART UNIT	PAPER NUMBER
			1711	
			·····	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MOI	NTHS	02/07/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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	Application No.	Applicant(s)			
	10/784,018	GURTLER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Benjamin J. Gillespie	1711			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the d	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>01 D</u>	ecember 2006.	·			
3) Since this application is in condition for allowa					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
4) Claim(s) 1.3.5-8.14-18.22-24 and 29-37 is/are	pending in the application.				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1,3,5-8,14-18,22-24 and 29-37</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers					
9) The specification is objected to by the Examine	er.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of:	priority under 35 U.S.C. § 119(a)-(d) or (f).			
1.⊠ Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Burea	·				
* See the attached detailed Office action for a list	of the certified copies not receive	ed.			
•					
Attachment(s)	-	2			
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application					
Paper No(s)/Mail Date	6) Other:				

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Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The language "obtainable" renders the claim indefinite because it is not possible to determine with certainty when such a claim is infringed, i.e. exactly when a product is "able" to be made by the claimed method and when it is not.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 3, 5-8, 14-18, 22-24, and 29-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al (2003/0096103) in view of Yagii et al ('015). Watanabe et al teach a metal coated plate and method for production, wherein the coating consists of a one-component polyurethane based baking system comprising blocked polyisocyanate, polymers having isocyanate-reactive groups, catalyst, water, and further additives and auxiliaries, wherein all components are present in amounts that correspond to the claimed ranges (Abstract, paragraphs 30, 31, 32, 36, 37, and 53). In particular, the blocked polyisocyanate consists of hexamethylene and isophorone diisocyanate, and the isocyanate-reactive polymers consist of polyesters (Paragraphs 30 and 33). Although diisocyanates may not inherently be hydrophilic,

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depending on the blocking agent utilized that property can change. Watanabe et al teach to use carbamic acid blocking agents, once neutralized allow the diisocyanate to be water dispersible (Paragraph 34 and 36). Since dispersion of the resin and blocked diisocyanate occurs before curing, it would have been obvious to modify the diisocyanate into a hydrophilic compound so that its content would be homogenous throughout the dispersion.

- 3. Watanabe et al goes on to disclose methods of production, wherein the catalyst is added to blocked polyisocyanate and isocyanate-reactive polymer mixture prior to being dispersed in water (Paragraphs 36 and 37). In paragraph 53, Watanabe et al teach another method wherein the blocked polyisocyanate, isocyanate-reactive polymer and catalyst are added together in the presence of solvent before dispersion in water. However, Watanabe et al teach the catalyst to consist of oxides of molybdenum but fail in teaching the specific claimed compounds as well as blocked aromatic polyisocyanates.
- 4. Yagii et al teach the production of urethane compounds corresponding to aliphatic and aromatic diisocyanates blocked by mono-functional alcohols, which are then thermally decomposed and become de-blocked reactive diisocyanates. Patentees teach the decomposed diisocyanate compounds consist of isophorone, hexamethylene and xylylene diisocyanate (Abstract, Col 9 lines 1-22, 31-44). In order to facilitate the thermal decomposition, molybdenum and tungsten catalysts are utilized, in particular molybdenum trioxide, molybdenum acetylacetonate, molybdenum dioxide, and tungstic acid (Col 9 lines 45-58). Finally, Yagii et al teach a method of thermal decomposition that preferably feeds the urethane composition into catalyst containing solvent (Col 10 lines 49-52).

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5. Although the starting components of Yagii et al aren't the same as Wanatabe et al, the intermediate shares the same structure as a diisocyanate blocked with a mono-functional alcohol. Therefore it would have been obvious to utilize the catalyst, and method of introducing the reaction starting components to the solvent catalyst mixture as taught by Yagii et al in Wanatabe et al because it facilitates the de-blocking of the same diisocyanate compounds blocked with mono-alcohols, and Wanatabe et al has already suggest the use of molybdenum oxide catalysts.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin J. Gillespie whose telephone number is 571-272-2472. The examiner can normally be reached on 8am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

B. Gillespie

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